AMSAT News Service Weekly Bulletins
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AMSAT NEWS SERVICE
ANS-226

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:

ans-editor@amsat.org

In this edition:

* ISS PCSAT2 PSK-31
* PCSAT2 Telemetry
* ARISS Status
* MRO Electra SDR
* AMSAT Awards

SB SAT @ AMSAT $ANS-226.01
ISS PCSAT2 PSK-31 Transponder is enabled

AMSAT News Service Bulletin 226.01
 From AMSAT HQ SILVER SPRING, MD.
Aug 14, 2005
To All RADIO AMATEURS
BID: $ANS-226.01

PCSAT2 will operate in conjunction with all of the other exciting modes on the ARISS system such as voice, packet, repeater and SSTV modes. But because these are all multiple transceivers all on the same station, their operation have to be coordinated so there is no mutual interference.

It looks like PCSAT2 can best contribute at this time by operating in PSK-31 mode for the near future. This is a very exciting new transponder mode which solves the congestion problem on FM repeaters by letting multiple stations all communicate at the same time.

PSK-31 users are welcome to try out the new PCSAT2 PSK-31 transponder on ISS with an uplink on 29.402 +/- 1 KHz and downlink on 435.275 +/- Doppler using FM.

The FM downlink lets everyone operate full duplex and everyone to see the same view of the passband as everyone else. Thus you can see exactly what your signal looks like compared to everyone else.

Help Wanted: PCSat2 PSK-31 Operations Coordinator Needed

To save power and to avoid any potential interferece to any ISS School contacts, the PSK-31 transponder is only on when a responsible PC2PSK control station in the ISS/PCSat2 footprint turns it on.

If you are interested in PSK-31 operations and want to volunteer to coordinate all the other operators and operations, then we have a job for you. This PSK-31 operations coordinator, who has become fully

familiar with ARISS operations, can next start to organize the pass-by-pass PSK-31 control ops.

Contact Bob Bruninga, WB4APR, at wb4apr@amsat.org if you wish to volunteer as the PCSat2 PSK-31 coordinator. Until the PCSat2 team is able to introduce the new coordinator please do not volunteer as a pass control operator.

Refer to this page:
http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

For information about the PCSat2 PSK-31 transponder and a diagram showing a basic configuration for PSK-31 earth stations.

[ANS thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for the above information.]

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SB SAT @ AMSAT $ANS-226.02
PCSAT2 Telemetry

AMSAT News Service Bulletin 226.02
From AMSAT HQ SILVER SPRING, MD.
Aug 14, 2005
To All RADIO AMATEURS
BID: $ANS-226.02

The PCSat2 team sends a, "Thank You!", to all of the AMSAT and APRS stations feeding science and telemetry data from 437.975 to the APRS-IS. This data feeds the live telemetry page and lets everyone see how the spacecraft is doing around the world:

http://www.pcsat2.info

We do, of course, need more stations feeding telemetry, especially from those stations in unusual footprints such as Hawaii and remote areas of the USA, Europe and downunder. More stations capable of receiving and forwarding 9600 baud data would be especially helpful.

The PCSat2 telemetry team plans to write-up a set of turn-key instructions on how to set up a satgate so that others not familiar with APRS can easily join this satgate network. In the interim, stations that wish to experiment and learn can begin using any version of APRS or download the stand-alone ALOGGER 2.02 program from http://www.billdiaz.dynip.com/.

To set up a satgate, just tune a radio and TNC to one of these channels:

437.975 9600 bd for PCSAT2 data
437.975 1200 bd for PCSAT2 telemetry
145.800 for ARISS packet data
145.825 for the original PCsat

You will need to run your favorite APRS software and connect to satgate.aprsca.net:10150. ALOGGER, mentioned previously now has serial port support for a TNC as a satgate monitoring station.

For the overall PCSAT2 Operations system, see

http://www.ew.usna.edu/~bruninga/pec/pc2ops.html

[ANS thanks Bob, WB4APR and the U.S. Naval Academy Satellite Lab for
the above information.]

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SB SAT @ AMSAT $ANS-226.03
ARISS Status

AMSAT News Service Bulletin 226.03
 From AMSAT HQ SILVER SPRING, MD.
Aug 14, 2005
To All RADIO AMATEURS
BID: $ANS-226.03

ARISS Contact Schedule and Successful school list updated
2005-08-11 23:00 UTC

Well done STS-114! Welcome back!

Due to the STS-114 operation and planned ISS EVAs, ARISS school
contacts were canceled or postponed. We are back, the next contact
is set for 2005-08-17.

There was also a rumor that the ISS was having contacts on the 40
meter band. There is no HF equipment available yet.

Expedition 11 crew is now on the ISS. John Phillips KE5DRY
Sergei Krikalev U5MIR

Expedition 12 crew is expected to dock 2005-10-03. This means that
there will probably not be any ARISS contacts from the week before
docking until the week of 2005-10-24.

Expedition 12

William McArthur, KC5ACR up on 11S Soyuz, scheduled launch 2005-10-01
Valery Tokarev up on 11S Soyuz, scheduled launch 2005-10-01
Thomas Reiter DF4TR up on STS-121, scheduled launch 2005-09-22

The schedule page has been updated as of 2005-08-11 23:00 UTC.

Look for the updated and enhanced frequency chart for packet,
voice, and crossband repeater modes showing Doppler correction.

http://www.amsat.org/amsat/ariss/news/ISS_frequencies_and_Doppler_correction
.rtf

Several schools will be live simulcasted via the world wide web.
Check out the instructions for each school on the schedule page to get
to the audio streaming.

Additional instructions have been added on how to listen in when the
streaming audio is provided by MCI.

Also, please monitor the IRLP and Echolink webpages for possible
upcoming contacts that will be simulcast.

IRLP website at:

     http://www.discoveryreflector.ca

This new site will have the links for simulcast contacts that have
IRLP and Echolink.

The successful school list has been updated as of 2005-07-21 04:00 UTC.

Check out the link on the schedule page to download a video that Mike Fincke KE5AIT and Gennady Padalka RN3DT have produced of life on the ISS.

The latest ARISS application, announcement and successful school list is now available on the ARISS web site. There are several ARISS web sites:

English: http://www.rac.ca/ariss/

French: http://c.avmdti.free.fr/ariss/index.htm

ARISS Europe: http://www.ariss-eu.org/

ARISS Japan: http://www.jarl.or.jp/ariss/

Other locations include:

Latest ARISS announcements and news
http://www.amsat.org/amsat/ariss/news/arissnews.txt

Successful school list
http://www.amsat.org/amsat/ariss/news/Successful_ARISS_schools.rtf

The ISS Fan Club website is:
http://www.issfanclub.com

K1ELA has a website at:
http://members.aol.com/k1ela/index.html

ON6SAT has a website at:
http://on6sat.com/links/

A listing of ARISS related magazine articles:
http://www.amsat.org/amsat/ariss/news/ARISS_magazine_articles.rtf

Currently the list includes articles from CQ, CQ VHF, QST, and The AMSAT Journal. Please contact me directly if you have additional suggestions.

[ANS thanks Charlie Sufana, AJ9N and SAREX for the above information]

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SB SAT @ AMSAT $ANS-226.04
MRO Electra SDR post-lauch checkout

AMSAT News Service Bulletin 226.04
From AMSAT HQ SILVER SPRING, MD.
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To All RADIO AMATEURS
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Advance information, subject to change:

Post-launch checkout of the Electra software-defined UHF radio aboard the Mars Reconnaissance Orbiter will be conducted on or about 26 September 2005. These tests will include CW transmissions during spacecraft turns to verify the UHF quadrifilar helix antenna pattern. Interested radio amateurs and amateur and professional radio-astron-omers in North America with sensitive receiving capabilities at 437.1

MHz can attempt to receive the UHF signal from MRO during this test.

More details will follow.

Jan
WB6VRN

Electra Integration and Test Engineer
Flight Communications Systems Section
NASA Jet Propulsion Laboratory

[ANS thanks Jan, WB6VRV for the above information]

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SB SAT @ AMSAT $ANS-226.05
AMSAT Awards

AMSAT News Service Bulletin 226.05
 From AMSAT HQ SILVER SPRING, MD.
Aug 14, 2005
To All RADIO AMATEURS
BID: $ANS-226.05

This week, congrats go out to all of the following.

Greg Higgins, KB5GLV, Satellite Communicators Club
Wadhah Al-Tailji, AE6QG, Satellite Communicators Club

Aruni Perera, VE4WMK, 51 on 51 Award #32

To see all the awards visit http://www.amsat.org or
http://www.amsatnet.com

73...bruce

[ANS thanks Bruce Paige, KK5DO for the above information]

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In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
Dave Johnson, G4DPZ
G4DPZ at amsat dot org